



Billing Code: 3510-22-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 223 and 224

[Docket No. 121204680-3387-01]

RIN 0648-XC387

Endangered and Threatened Wildlife; 90-Day Finding on a Petition to List the Humphead Wrasse as Threatened or Endangered Under the Endangered Species Act

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce.

ACTION: Notice of 90-day petition finding, request for information.

SUMMARY: We (NMFS) announce a 90-day finding on a petition to list the humphead wrasse (Cheilinus undulatus) as threatened or endangered and designate critical habitat under the Endangered Species Act (ESA). We find that the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted. Accordingly, we will conduct a review of the status of this species to determine if the petitioned action is warranted. To ensure that the status review is comprehensive, for 60 days we are soliciting information pertaining to this species from any interested party.

DATES: Information and comments on the subject action must be received by [insert date 60 days after date of publication in the FEDERAL REGISTER].

ADDRESSES: You may submit information, identified by the code NOAA-NMFS-2013-0001, by any of the following methods:

- Electronic Submissions: Submit all electronic information via the Federal eRulemaking Portal [http:// www.regulations.gov](http://www.regulations.gov). Go to www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2013-0001, click the “Comment Now!” icon, complete the required fields, and enter or attach your comments.
- Mail: NMFS, Pacific Islands Regional Office, Regulatory Branch Chief, 1601 Kapiolani Boulevard, Suite 1110, Honolulu, HI 96814.
- Hand delivery: You may hand deliver written information to our office during normal business hours at the street address given above.

Instructions: All information received is a part of the public record and may be posted to <http://www.regulations.gov> without change. All personally identifiable information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit confidential business information or otherwise sensitive or protected information. We will accept anonymous submissions. Attachments to electronic comments will be accepted in Microsoft Word, Excel, Corel WordPerfect, or Adobe PDF file formats only.

FOR FURTHER INFORMATION CONTACT: Krista Graham, NMFS Pacific Islands Regional Office, 808-944-2238; or Lisa Manning, NMFS Office of Protected Resources, 301-427-8466.

SUPPLEMENTARY INFORMATION:

Background

On October 31, 2012, we received a petition from the WildEarth Guardians to list the humphead wrasse (Cheilinus undulatus) as threatened or endangered under the ESA and to designate critical habitat concurrent with the listing under the ESA. Copies of this petition are available from us (see ADDRESSES, above).

ESA Statutory and Regulatory Provisions and Evaluation Framework

Section 4(b)(3)(A) of the ESA of 1973, as amended (U.S.C. 1531 et seq.), requires, to the maximum extent practicable, that within 90 days of receipt of a petition to list a species as threatened or endangered, the Secretary of Commerce make a finding on whether that petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted, and to promptly publish the finding in the Federal Register (16 U.S.C. 1533(b)(3)(A)). When we find that substantial scientific or commercial information in a petition indicates the petitioned action may be warranted (a “positive 90-day finding”), we are required to promptly commence a review of the status of the species concerned, which includes conducting a comprehensive review of the best available scientific and commercial information. Within 12 months of receiving the petition, we must conclude the review with a finding as to whether, in fact, the petitioned action is warranted. Because the finding at the 12-month stage is based on a significantly more thorough review of the available information, a “may be warranted” finding at the 90-day stage does not prejudice the outcome of the status review.

Under the ESA, a listing determination may address a “species,” which is defined to also include subspecies and, for any vertebrate species, any distinct population segment (DPS) that interbreeds when mature (16 U.S.C. 1532(16)). A joint NOAA-U.S. Fish and Wildlife Service (USFWS) policy clarifies the agencies’ interpretation of the phrase “distinct population segment” for the purposes of listing, delisting, and reclassifying a species under the ESA (“DPS Policy”; 61 FR 4722; February 7, 1996). A species, subspecies, or DPS is “endangered” if it is in danger of extinction throughout all or a significant portion of its range, and “threatened” if it is likely to become endangered within the foreseeable future throughout all or a significant portion of its

range (ESA sections 3(6) and 3(20), respectively; 16 U.S.C. 1532(6) and (20)). Pursuant to the ESA and our implementing regulations, the determination of whether a species is threatened or endangered shall be based on any one or a combination of the following five section 4(a)(1) factors: the present or threatened destruction, modification, or curtailment of habitat or range; overutilization for commercial, recreational, scientific, or educational purposes; disease or predation; inadequacy of existing regulatory mechanisms; and any other natural or manmade factors affecting the species' existence (16 U.S.C. 1533(a)(1), 50 CFR 424.11(c)).

ESA-implementing regulations issued jointly by NMFS and USFWS (50 CFR 424.14(b)) define "substantial information" in the context of reviewing a petition to list, delist, or reclassify a species as the amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted. When evaluating whether substantial information is contained in a petition, we must consider whether the petition: (1) clearly indicates the administrative measure recommended and gives the scientific and any common name of the species involved; (2) contains detailed narrative justification for the recommended measure, describing, based on available information, past and present numbers and distribution of the species involved and any threats faced by the species; (3) provides information regarding the status of the species over all or a significant portion of its range; and (4) is accompanied by the appropriate supporting documentation in the form of bibliographic references, reprints of pertinent publications, copies of reports or letters from authorities, and maps (50 CFR 424.14(b)(2)).

At the 90-day stage, we evaluate the petitioner's request based upon the information in the petition including its references, and the information readily available in our files. We do not

conduct additional research, and we do not solicit information from parties outside the agency to help us in evaluating the petition. We will accept the petitioner's sources and characterizations of the information presented, if they appear to be based on accepted scientific principles, unless we have specific information in our files that indicates the petition's information is incorrect, unreliable, obsolete, or otherwise irrelevant to the requested action. Information that is susceptible to more than one interpretation or that is contradicted by other available information will not be dismissed at the 90-day finding stage, so long as it is reliable and a reasonable person would conclude that it supports the petitioner's assertions. Conclusive information indicating the species may meet the ESA's requirements for listing is not required to make a positive 90-day finding. We will not conclude that a lack of specific information alone negates a positive 90-day finding, if a reasonable person would conclude that the unknown information itself suggests an extinction risk of concern for the species at issue.

To make a 90-day finding on a petition to list a species, we evaluate whether the petition presents substantial scientific or commercial information indicating the subject species may be either threatened or endangered, as defined by the ESA. First, we evaluate whether the information presented in the petition, along with the information readily available in our files, indicates that the petitioned entity constitutes a "species" eligible for listing under the ESA. Next, we evaluate whether the information indicates that the species at issue faces extinction risk that is cause for concern; this may be indicated in information expressly discussing the species' status and trends, or in information describing impacts and threats to the species. We evaluate any information on specific demographic factors pertinent to evaluating extinction risk for the species at issue (e.g., population abundance and trends, productivity, spatial structure, age

structure, sex ratio, diversity, current and historical range, habitat integrity or fragmentation), and the potential contribution of identified demographic risks to extinction risk for the species. We then evaluate the potential links between these demographic risks and the causative impacts and threats identified in section 4(a)(1).

Information presented on impacts or threats should be specific to the species and should reasonably suggest that one or more of these factors may be operative threats that act or have acted on the species to the point that it may warrant protection under the ESA. Broad statements about generalized threats to the species, or identification of factors that could negatively impact a species, do not constitute substantial information that listing may be warranted. We look for information indicating that not only is the particular species exposed to a factor, but that the species may be responding in a negative fashion, then we assess the potential significance of that negative response.

Humphead Wrasse Species Description

The humphead wrasse is a large, long-lived, slow growing, and naturally rare species of the Indo-West Pacific. Known by several other common names, including Napoleon wrasse, giant wrasse, and Maori wrasse, it is the largest species within its family, Labridae; and one of the largest of all reef fishes (Donaldson and Sadovy, 2001). Humphead wrasse are thought to reach sizes of over 200 cm; however, records of fish greater than 150 cm (fork length) are apparently lacking (Choat et al., 2006). Humphead wrasse reach sexual maturity at 5-7 years and 35-85 cm total length (TL), and can live at least 30 years (Sadovy de Mitcheson et al., 2010; Sadovy et al., 2003; Donaldson and Sadovy, 2001). The humphead wrasse is a carnivorous predator with a diet that includes a variety of reef-associated animals, including molluscs,

crustaceans, sea urchins, fishes, and starfishes - including the toxic crown-of-thorns starfish (Donaldson and Sadovy, 2001). They are generally solitary, but can occur in small groups and are known to congregate to form spawning aggregations. Spawning activity is tidally influenced and, depending on location, occurs during multiple months or every month of the year (Colin, 2010; Sadovy et al., 2003).

Humphead wrasse undergo changes in body form, color, and sex as they grow and mature. Small juveniles are pale with black markings; larger juveniles become pale green with black markings. Adults are a striking blue/green with large scales, intricate markings around the eyes, and a yellow margin on the caudal fin. Large adults also develop a large bump on their forehead and thickened, prominent lips. As with other wrasses and some other reef fish species, humphead wrasse are protogynous hermaphrodites, meaning males start out as females and undergo a sexual transition (Choat et al., 2006; Sadovy et al., 2003).

The humphead wrasse ranges throughout the tropical and sub-tropical Indo-Pacific, from Egypt, the eastern coast of Africa, and Madagascar, throughout all of Southeast Asia; north to southern Japan; south to northern Australia; and eastward to Fiji, the Marshall Islands, and the Cook Islands (Russell, 2004; Sadovy et al., 2003). Within U.S. waters, humphead wrasse occur in American Samoa, Guam, Commonwealth of the Northern Mariana Islands (CNMI), and the Line Islands (Russell, 2004; Sadovy et al., 2003). Within this range, distribution of the fish is patchy.

Humphead wrasses are typically associated with well-developed coral reefs. Adult humphead wrasse are thought to prefer steep outer reef edges, channels, and lagoon reef slopes at about 2-60 m depth (Sadovy et al., 2003; Donaldson and Sadovy, 2001). Small, post-settled

humphead wrasse have been observed in branching hard and soft corals, coral rubble, and seagrasses (Tupper, 2007; Sadovy et al., 2003). Juveniles are more cryptic than adults and are often associated with denser coral reefs and thickets, coral rubble, bushy macroalgae, and seagrasses (Tupper, 2007; Sadovy et al., 2003). Juveniles typically occur inshore, while larger fish are more common in deeper, outer reefs or lagoons (Sadovy et al., 2003).

Analysis of the Petition

The petition contains a detailed narrative justification for the recommended measure and provides information on the species' taxonomy, geographic distribution, habitat characteristics, population status and trends, and threats. The petition is accompanied by appropriate supporting documentation. Below is a synopsis of our analysis of the information provided in the petition and readily available in our files.

Humphead Wrasse Status

The petitioner acknowledges that data on total numbers, globally or nationally, are not available for this species; however, humphead wrasse densities are provided by several studies cited in the petition. In general, these studies indicate that densities of humphead wrasse are low (less than 20 per 10,000 square meters), even within preferred habitats (Gillet, 2010; Sadovy et al., 2003). Biennial surveys conducted by NOAA's Pacific Islands Fisheries Science Center (PIFSC) during 2002-2012 at 32 U.S. Pacific islands indicate that the species is not common at any of the survey sites (PIFSC, unpublished data). The exception is Wake Atoll, where humphead wrasse are more abundant and more frequently encountered in surveys (PIFSC, unpublished data; NOAA, 2009). Wake Atoll is very isolated, relatively pristine and, as of 2009,

part of the Pacific Remote Islands Marine National Monument, where commercial fishing is banned out to 50 nautical miles.

The petitioner cites studies that show humphead wrasse densities are lower in areas that are fished, and very low or zero in areas with high fishing pressure and/or large human populations (Gillet, 2010; Sadovy et al., 2003). Results of 24 underwater visual census surveys from 11 range states were reviewed by Sadovy et al. (2003) and show that there is a decline in both density and body size of humphead wrasse in areas of higher fishing pressure. Landings data are limited, but severe declines in humphead wrasse landings have been reported from some locations, such as Borneo and Malaysia, over relatively short time scales (Scales et al., 2007; Sadovy et al., 2003). Interviews conducted in various locations throughout the species' range, including CNMI, Philippines, Australia, Malaysia and Fiji, indicate widely shared perceptions among elder fishers that abundance of humphead wrasse has declined and that this decline is largely attributed to fishing pressure (CNMI Final Grant Report, 2010; Sadovy et al., 2003). Humphead wrasse are also considered extirpated or nearly extirpated from some locations at the edge of its range, including parts of Fiji, southwestern Indian Ocean and the South China Sea (Sadovy et al., 2003).

Threats to Humphead Wrasse

The petition identifies overutilization and inadequate protections as major threats to this species. Other threats identified in the petition but not explicitly linked to humphead wrasse status include destruction and degradation of coral reef habitat, human population growth, climate change, and ocean acidification. The petitioner also cites natural rarity as a factor contributing to the species' risk of extinction.

The humphead wrasse is highly prized within the Indo-Pacific region as a luxury food fish, primarily in Hong Kong, Taiwan, and Singapore (Sadovy et al., 2003; Erdmann and Pet-Soede, 1997), and garners the highest price of all fishes in the live reef fish food trade (Sadovy de Micheson et al., 2010). Demand for this fish is expected to remain high, and fishing efforts are likely to continually extend into new areas as local populations are fished out (Sadovy et al., 2003; Burke et al., 2002; Barber and Pratt, 1997).

The petitioner provides references that suggest this species is vulnerable to fishing pressure. For example, Scales et al. (2007) documented exponential declines in relative abundance of humphead wrasse in under a decade in northern Borneo and suggest that serial depletion is occurring. Additionally, the humphead wrasse has been noted to experience a greater than 50 percent decline over the last three generations in locations where data are available (Russell, 2004). This decline is predicted to continue or even accelerate with the expected growth of the live reef fish food trade (Russell, 2004). Also, the international live-fish fishery appears to be largely focused on juveniles (fish under 500 mm TL), which are then held in cages until they grow to market size (Sadovy de Micheson et al., 2010). This practice exacerbates the potential for overexploitation because fish are removed from the wild prior to reproducing.

The petition discusses how, in addition to other general threats to coral reefs, humphead wrasse fishing practices are posing a threat to humphead wrasse habitat. Stunning and capturing humphead wrasse by applying sodium cyanide to reefs, a common method of live-capture, damages corals and other reef organisms (Bryant et al., 1998; Barber and Pratt, 1997). This practice is prohibited in many areas but is still used in some areas for collecting humphead

wrasse for the live reef fish food trade (Sadovy et al., 2003; Bryant et al., 1998; Barber and Pratt, 1997).

The petition proposes that exploitation threats to this species are not being addressed, a result of the lack of protective measures in most countries and the inadequacy of regulatory mechanisms where they do exist. Although this species receives some protections through local fishing restrictions, Sadovy et al. (2003) indicates that, with few exceptions, protective legislation is largely ineffective due to the lack of enforcement or permitted exemptions. Additionally, despite international trade concerns and protections granted with the species' listing in Appendix II of the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES), there is a body of evidence indicating illegal, unregulated, and unreported fishing and trade of the humpback wrasse (CITES Workshop Report, 2010).

Petition Finding

After reviewing the petitioner's information and the information in our files, we have determined there is substantial information indicating that the petitioned action may be warranted. The low natural densities and other life history characteristics of humphead wrasse, coupled with evidence of declines in abundance, overutilization, and apparent inadequacy of existing regulatory mechanisms and protections for this species and its coral reef habitat are cause for concern. Because we have found that substantial information was presented on the above factors, we will commence a status review of the species. During our status review, we will fully address all five of the factors set out in section 4(a)(1) of the ESA. At the conclusion of the status review, we will determine whether the petitioned action is warranted. As previously noted, a "may be warranted" finding does not prejudice the outcome of the status review.

Information Solicited

As required by section 4(b)(3)(B) of the ESA and NMFS' implementing regulations (50 CFR 424.14(b)(2)), we are to commence a review of the status of the species and make a determination within 12 months of receiving the petition as to whether the petitioned action is warranted. We intend that any final action resulting from this review be as accurate and as effective as possible. Therefore, we are opening a 60-day public comment period to solicit information from the public, government agencies, the scientific community, industry, and any other interested parties on the status of humphead wrasse throughout its range including: (1) historical and current abundance, distribution, and population trends; (2) biological information (life history, population genetics, population connectivity, etc.); (3) status of historical and current habitat, including spawning aggregation sites; (4) regulatory mechanisms and management measures, including enforcement thereof, designed to manage fishing or protect habitats; (5) any current or planned activities that may adversely impact the species; and (6) ongoing or planned efforts to protect and restore the species and their habitats. We request that all information be accompanied by: (1) supporting documentation such as maps, bibliographic references, or reprints of pertinent publications; and (2) the submitter's name, address, and any association, institution, or business that the person represents. Section 4(b)(1)(A) of the ESA and NMFS' implementing regulations (50 CFR 424.11(b)) require that a listing determination be made solely on the basis of the best scientific and commercial data, without consideration of possible economic or other impacts of the determination. During the 60-day public comment period we are seeking information related to the status of humphead wrasse throughout its range.

Peer Review

On July 1, 1994, NMFS, jointly with the USFWS, published a series of policies regarding listings under the ESA, including a policy for peer review of scientific data (59 FR 34270). The intent of the peer review policy is to ensure listings are based on the best scientific and commercial data available. The Office of Management and Budget issued its Final Information Quality Bulletin for Peer Review on December 16, 2004. The Bulletin went into effect June 16, 2005, and generally requires that all “influential scientific information” and “highly influential scientific information” disseminated on or after that date be peer reviewed. Because the information used to evaluate this petition may be considered “influential scientific information,” we solicit the names of recognized experts in the field that could take part in the peer review process for this status review (see ADDRESSES). Independent peer reviewers will be selected from the academic and scientific community, tribal and other native groups, Federal and state agencies, the private sector, and public interest groups.

References Cited

A complete list of references is available upon request from the Pacific Islands Regional Office, Protected Resource Division (see ADDRESSES).

Authority

The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

Dated: February 22, 2013.

Alan D. Risenhoover,
Director, Office of Sustainable Fisheries,
performing the functions and duties of the
Deputy Assistant Administrator for Regulatory Programs,
National Marine Fisheries Service.

[FR Doc. 2013-04718 Filed 02/27/2013 at 8:45 am; Publication Date: 02/28/2013]